A complete listing of all claims in this application is set forth below.

Claims

(Cancelled) Claims 1-26.

27. (Previously presented) A modular washing machine control comprising:

a circuit board;

a processor mounted on the circuit board, the processor having input lines and output lines;

a water valve driver mounted on the circuit board and being operatively coupled to the processor so that the processor operates a water valve by generating a signal on an output line of the processor that is coupled to the water valve driver;

a water temperature selector mounted on the circuit board and operatively connected to the processor so that a signal generated on the circuit board by the selector is received by the processor and used to control the signal on the output line to the water valve driver; and

a housing mounted to the circuit board to enclose the water temperature selector, water valve driver, and processor so that the water temperature selector, water valve driver, and processor may be mounted to the frame of a washing machine as an integral unit.

28. (Previously presented) The modular control of claim 27, the selector including:

a potentiometer mounted on the circuit board; and

a shaft extending through the housing and operatively coupled to the potentiometer so that rotation of the shaft varies the resistance of the potentiometer and generates a variable signal on the circuit board for the processor to determine the water temperature for a washing machine.

29. (Previously presented) The modular control of claim 28, the processor further including:

an analog-to-digital input coupled to the potentiometer for converting an analog signal received from the potentiometer to a digital value;

an internally stored lookup table; and

the processor determining the selected water temperature by selecting a water temperature from the internally stored lookup table in accordance with the digital value for the analog signal received from the potentiometer.

30. (Previously presented) The modular control of claim 29 further comprising:

a temperature sensor operatively coupled to the processor, the sensor for sensing temperature of water downstream of a water valve

coupled to the water valve driver and for generating a temperature signal received by the processor; and

the processor generates the signal coupled to the water valve driver in accordance with the water temperature selected from the internally stored lookup table and the temperature signal received from the temperature sensor.

31. (Previously presented) The modular control of claim 30 further comprising:

a detent/position clip; and

a series of detents carried by the shaft that engage the detent/position clip as the shaft is rotated to generate positive rotational stops for the shaft rotation that correlate to water temperature selections.

32. (Previously presented) A method for forming an integral machine control module for mounting to the frame of a washing machine comprising:

mounting a processor having input lines and output lines on a circuit board;

mounting a water valve driver on the circuit board and operatively coupling the water valve driver to the processor so that the processor operates a water valve by generating a signal on an output line of the processor that is coupled to the water valve driver;

mounting a water temperature selector on the circuit board and operatively coupling the water temperature selector to the processor so that a signal generated on the circuit board by the selector is received by the processor to control the signal on the output line to the water valve driver; and

enclosing the circuit board in a housing so that the water temperature selector, water valve driver, and processor may be mounted to the frame of a washing machine as an integral unit.

33. (Previously presented) The method of claim 32, the selector mounting including:

mounting a potentiometer on the circuit board; and

extending a shaft through the housing so the shaft is operatively coupled to the potentiometer whereby rotation of the shaft varies the resistance of the potentiometer and generates a variable signal on the circuit board for the processor to determine the water temperature for a washing machine.

34. (Previously presented) The method of claim 33, the potentiometer mounting further including:

coupling the potentiometer to an analog-to-digital input of the processor to convert the signal from the potentiometer to a digital value; and

selecting a water temperature from a lookup table internally stored in the processor in accordance with the digital value.

35. (Previously presented) The method of claim 34 further comprising:

generating a signal corresponding to a temperature of water downstream of a water valve coupled to the water valve driver mounted on the circuit board; and

generating a signal with the processor for controlling the water valve driver in accordance with the water temperature selected from the lookup table.

36. (Previously presented) The method of claim 35 further comprising:

locating a series of detents about the shaft; and

mounting a detent/position clip proximate the series of detents so that the detent/position clip engages the series of detents as the shaft is rotated to generate positive rotational stops for the shaft rotation that correlate to water temperature selections.

37. (Previously presented) A modular washing machine control comprising:

a circuit board;

a processor mounted on the circuit board, the processor having input lines and output lines;

a water valve driver mounted on the circuit board and being operatively coupled to the processor so that the processor operates a water valve by generating a signal on an output line of the processor that is coupled to the water valve driver; and

a water temperature selector mounted on the circuit board and operatively connected to the processor so that a signal generated on the circuit board by the selector is received by the processor and used to control the signal on the output line to the water valve driver.

38. (Previously presented) The modular control of claim 37, the selector including:

a potentiometer mounted on the circuit board; and

a shaft extending from the potentiometer and operatively coupled to the potentiometer so that rotation of the shaft varies the resistance of the potentiometer and generates a variable signal on the circuit board for the processor to determine the water temperature for a washing machine.

39. (Previously presented) The modular control of claim 38, the processor further including:

an analog-to-digital input coupled to the potentiometer for converting an analog signal received from the potentiometer to a digital value;

an internally stored lookup table; and

the processor determining the selected water temperature by selecting a water temperature from the internally stored lookup table in accordance with the digital value for the analog signal received from the potentiometer.

40. (Previously presented) The modular control of claim 39 further comprising:

a temperature sensor for sensing temperature of water downstream of a water valve coupled to the water valve driver and for generating a temperature signal; and

the processor generates the signal coupled to the water valve driver in accordance with the water temperature selected from the internally stored lookup table and the temperature signal received from the temperature sensor.

41. (Previously presented) The modular control of claim 40 further comprising:

a detent/position clip; and

a series of detents carried by the shaft that engage the detent/position clip as the shaft is rotated to generate positive rotational stops for the shaft rotation that correlate to water temperature selections.

42. (Previously presented) The modular control of claim 38 further comprising:

a housing mounted to the circuit board to enclose the potentiometer, water valve driver, and processor so that the potentiometer, water valve driver, and processor form an integral unit.